

FIG.

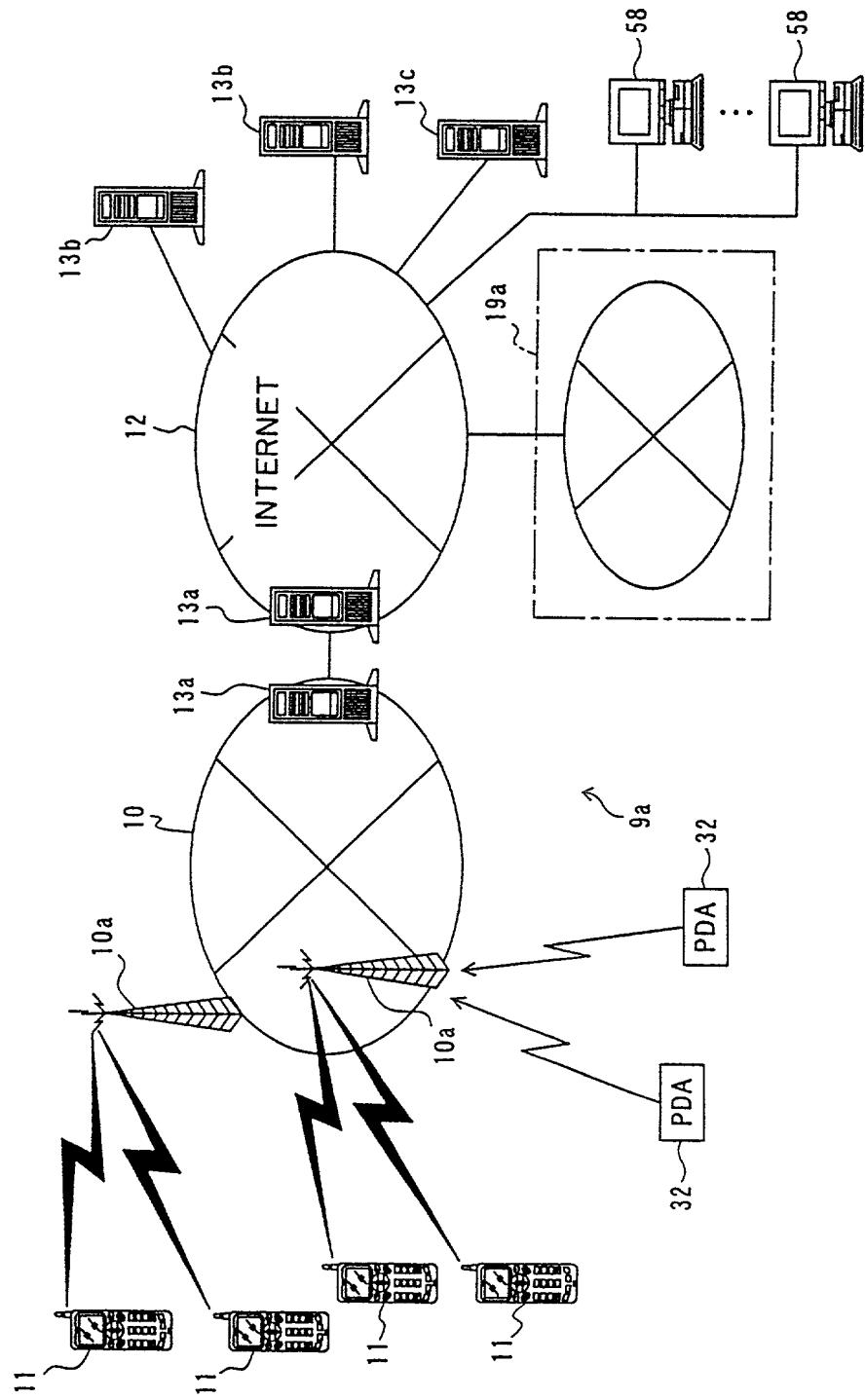


FIG. 2

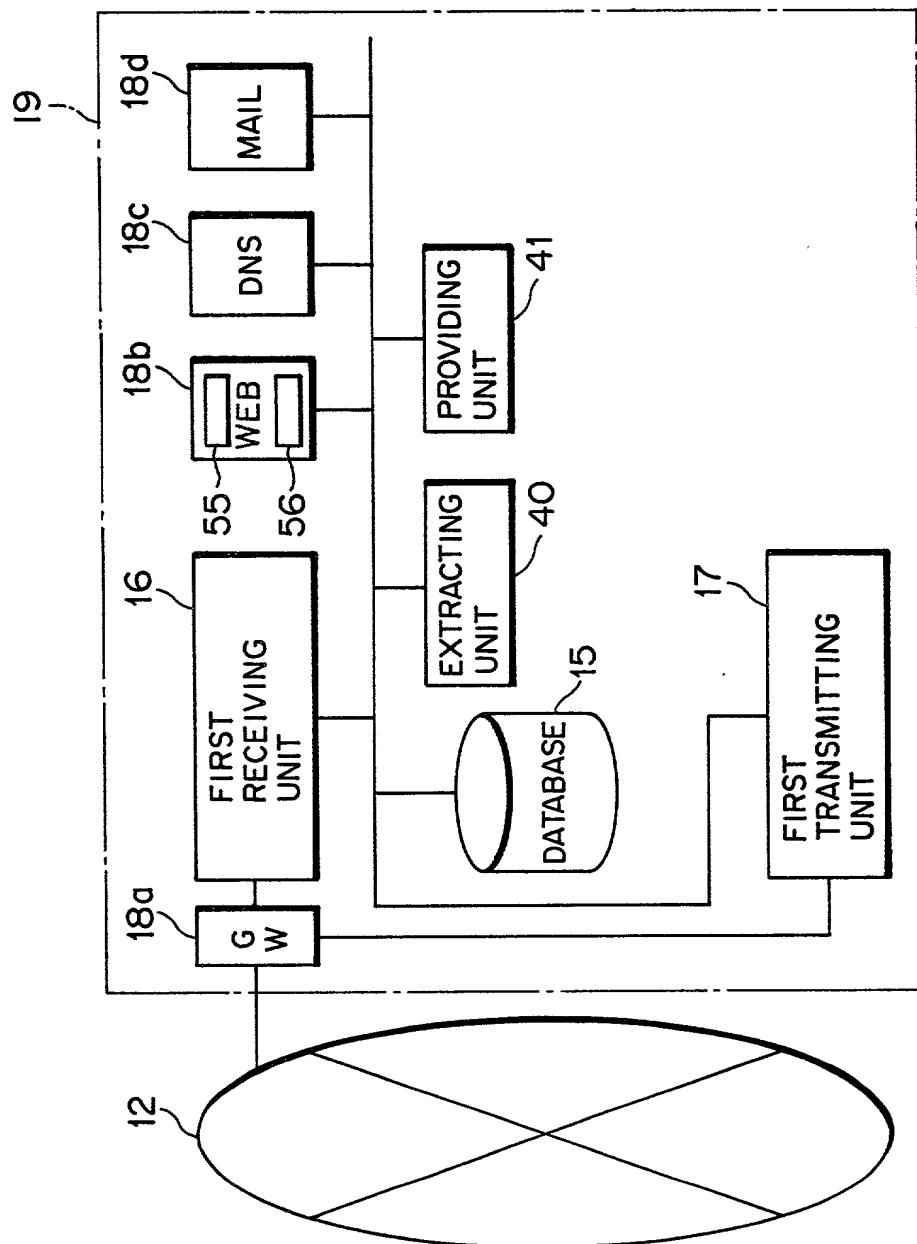


FIG. 3

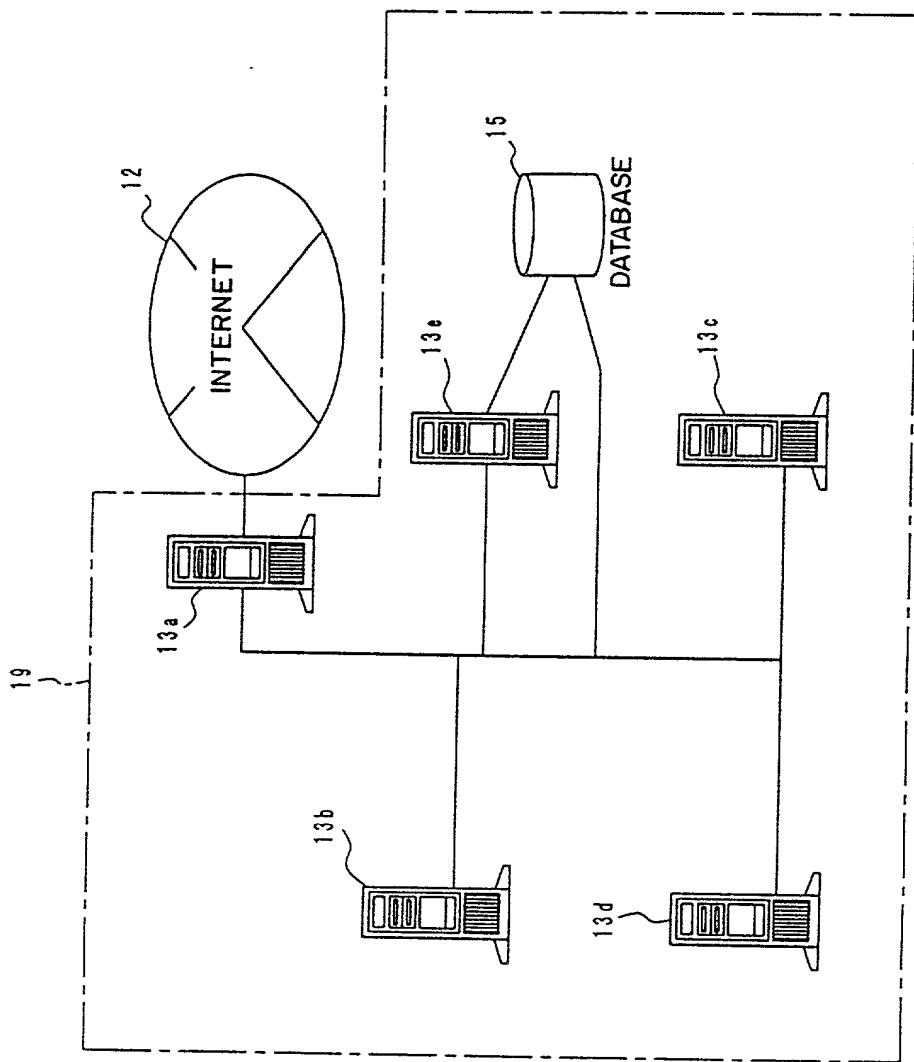


FIG. 4

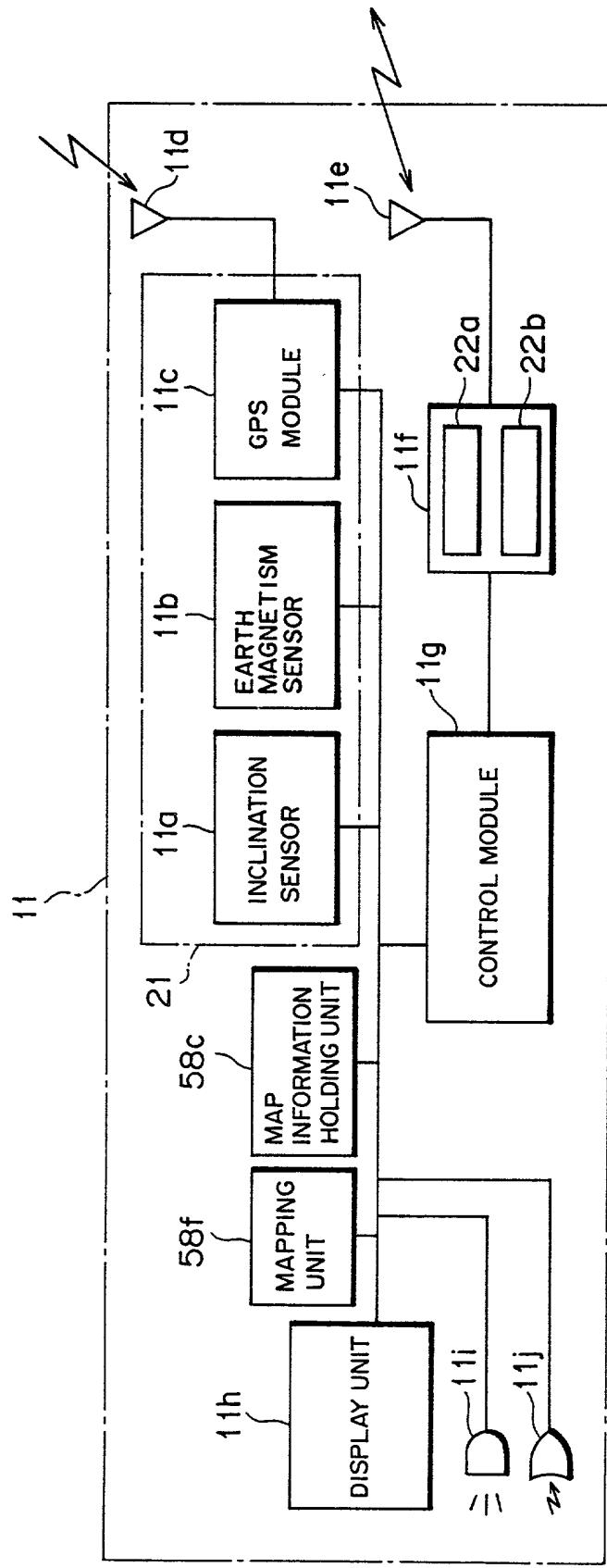


FIG. 5

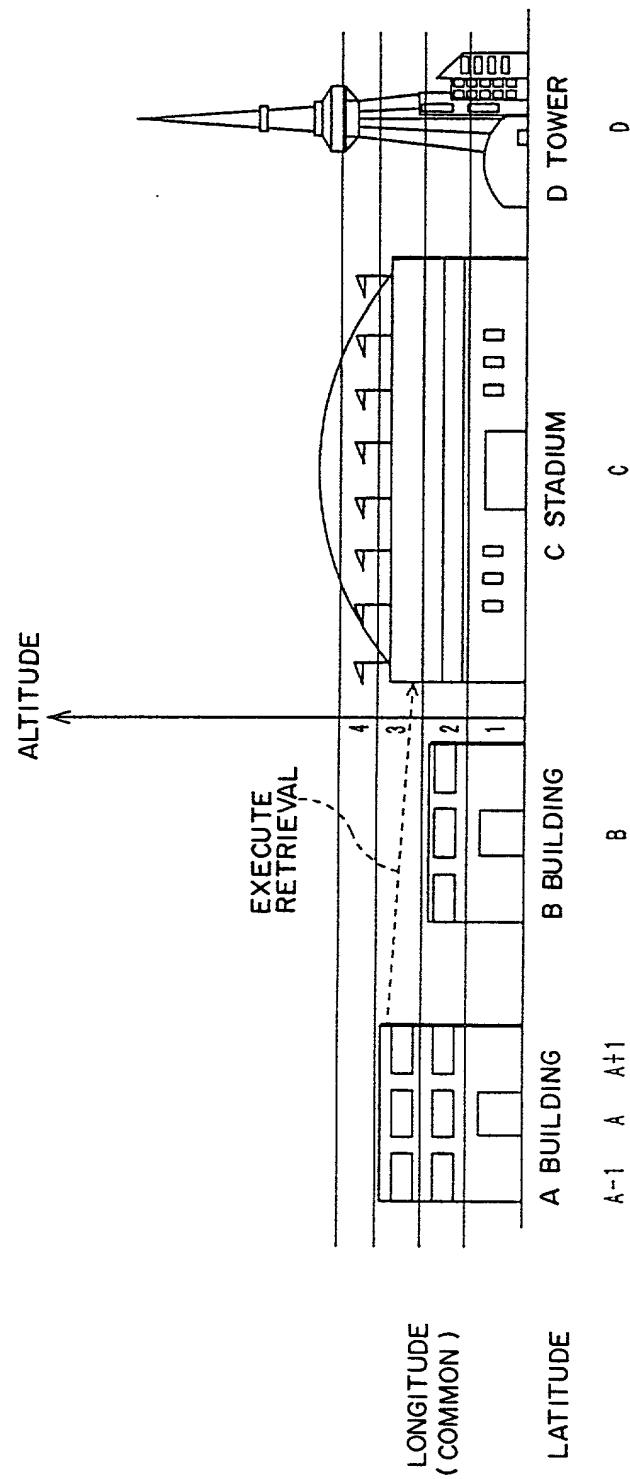
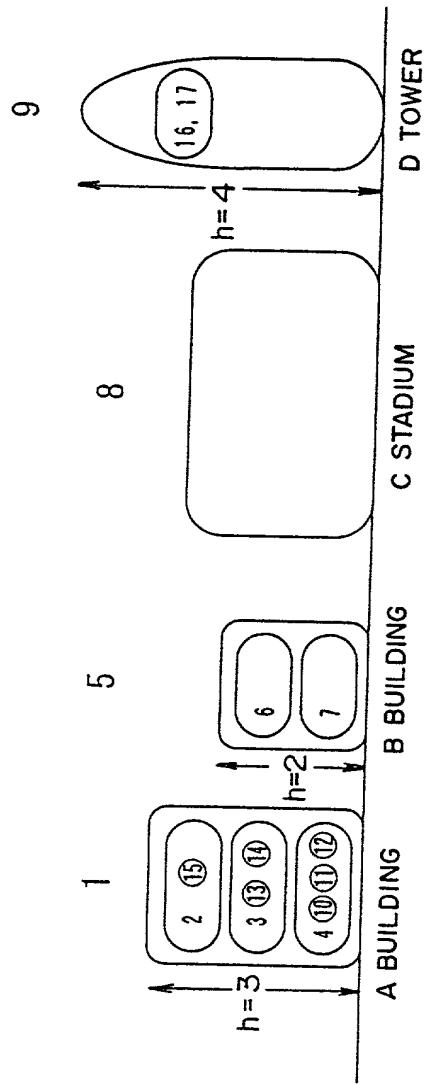


FIG. 6



F I G. 7

15(15a)

BUBBLE NUMBER	SPATIAL OCCUPANCY INFORMATION	URL	ATTRIBUTE INFORMATION
1	A/X/0/3	http://www.xxx:100	PUB
2	A/X/3/1	http://www.xxx:101	HOSPITAL (SURGERY)
3	A/X/3/1	http://www.xxx:101	HOSPITAL (INTERNAL)
4	A/X/3/1	http://www.xxx:101	HOSPITAL (STOMACH AND INTESTINAL)
5	A/X/3/1	http://www.xxx:101	HOSPITAL (NOSE AND EAR)
6	A/X/2/1	http://www.xxx:102	HOTEL
7	A/X/1/1	http://www.xxx:103	GASOLINE STATION PREPARATORY SCHOOL
8	B/X/0/2	http://www.xxx:200	PREPARATORY SCHOOL (TENTH-GRADE)
9	B/X/0/2	http://www.xxx:200	PREPARATORY SCHOOL (TWELFTH-GRADE)
10	B/X/2/1	http://www.xxx:201	ITALIAN RESTAURANT
11	B/X/1/1	http://www.xxx:202	TAX OFFICE
12	C/X/0/3	http://www.xxx:300	STADIUM
13	D/X/0/4	http://www.xxx:400	RADIO TOWER
14	A-1/X/1/0.5	http://www.xxx:110	RESTAURANT
15	1/X/1/0.5	http://www.xxx:111	STATION
16	A+1/X/1/0.5	http://www.xxx:112	FIREHOUSE
17	A-1/X/2/0.5	http://www.xxx:120	TEMPLE
18	A/X/2/0.5	http://www.xxx:121	ELECTRIC APPLIANCES STORE (PERSONAL COMPUTER)
19	A/X/2/0.5	http://www.xxx:121	ELECTRIC APPLIANCES STORE (CELL PHONE)
20	A/X/2/0.5	http://www.xxx:121	ELECTRIC APPLIANCES STORE (REFRIGERATOR)
21	A/X/3/0.5	http://www.xxx:130	CHINESE RESTAURANT
22	D/X/4/0.5	http://www.xxx:410	ART MUSEUM
23	D/X/4/0.5	http://www.xxx:411	BOOK STORE

FIG. 8

BUBBLE NUMBER	SPACIAL OCCUPANCY INFORMATION (LATITUDE / LONGITUDE ALTITUDE / BUBBLE DIAMETER)	OBJECT URL	CONTENT NAME
1	149° 22' 20" / 62° 11' 11" /30/5	http://www.nifty.ne.jp/ gps/user/mori/index.html	A BUILDING
2	149° 21' 15" / 62° 09' 04" /15/20	http://www.nifty.ne.jp/ gps/user/yashi/index.html	B RESTAURANT
3	149° 19' 12" / 62° 14' 07" /50/200	http://www.nifty.ne.jp/ gps/com/fujitsu/index.html	C STADIUM
4			

FIG. 9(a)

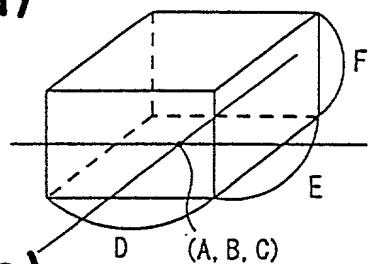


FIG. 9(c)

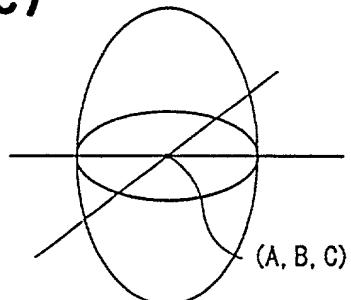


FIG. 9(e)

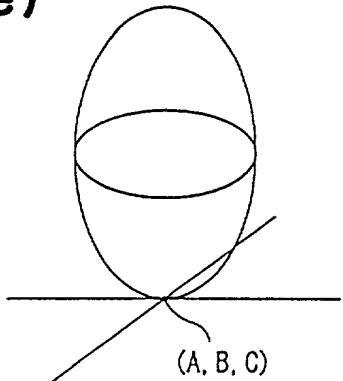


FIG. 9(g)

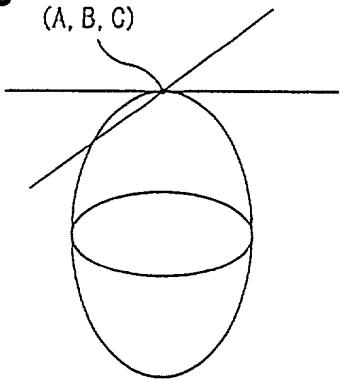


FIG. 9(b)

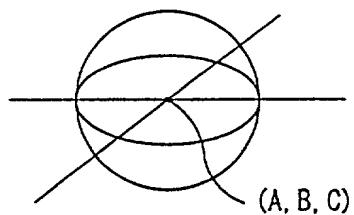


FIG. 9(d)

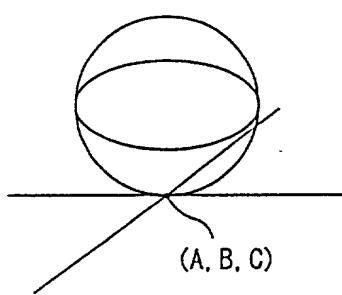


FIG. 9(f)

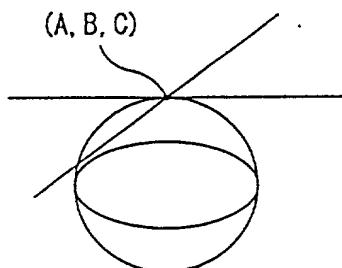


FIG. 9(h)

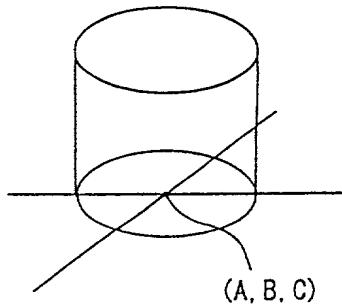
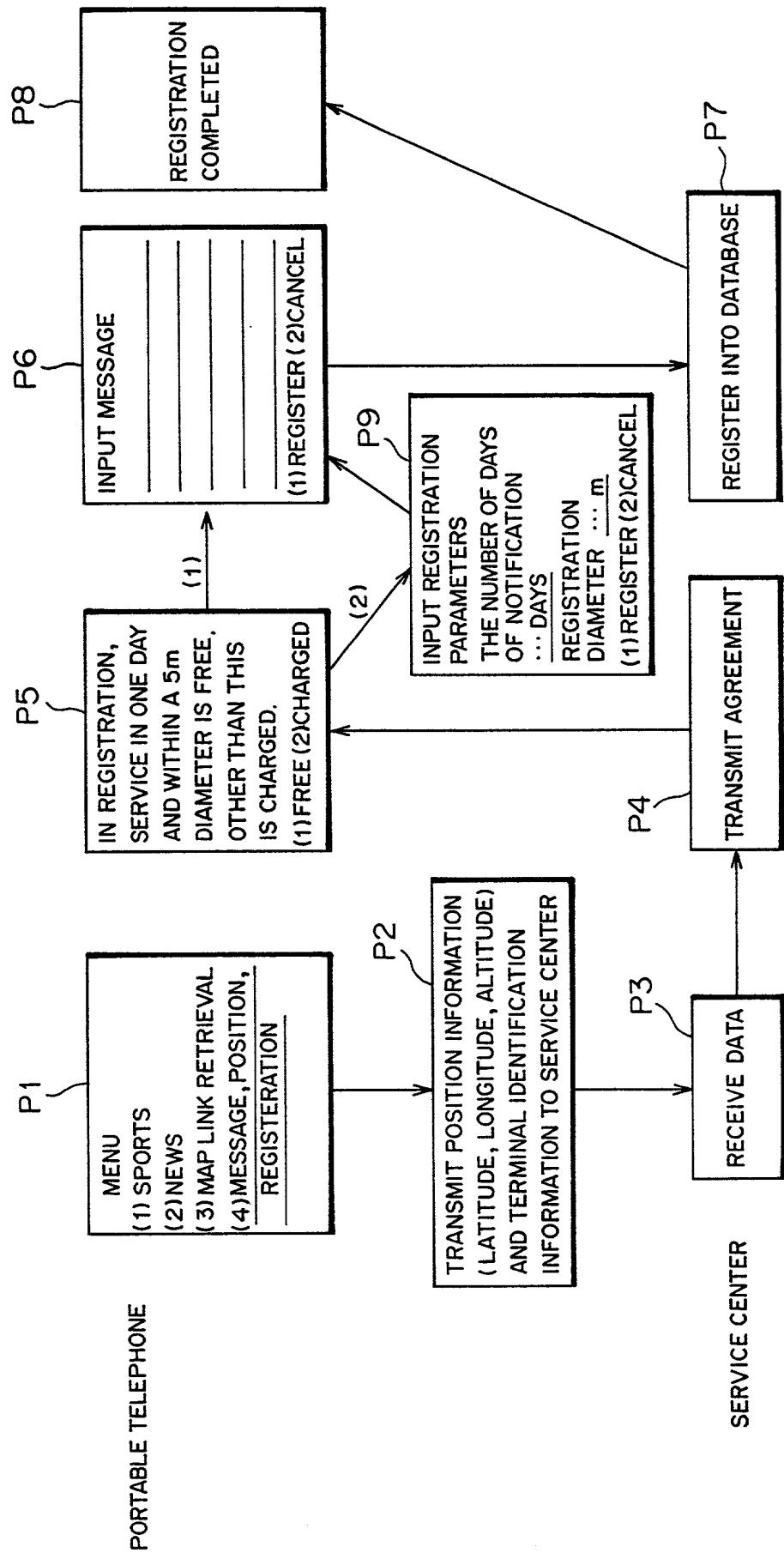


FIG. 10



F I G. 11

BUBBLE DIAMETER	INFORMATION NOTIFICATION TIME (DAY)	CHARGE	NOTE
5	1 DAY 2 WEEKS 3 MONTHS	0 YEN 100 YEN 1000 YEN	PERSONAL USE USE TO COLLECT MEMBERS OF A CIRCLE OR THE LIKE MENU OF ONE - MAN SHOP
20	1 DAY 2 WEEKS	1000 YEN 5000 YEN	AD. OF BARGAIN SALE ROAD GUIDANCE
50	1 DAY 1 WEEK	2000 YEN 10000 YEN	FESTIVAL GUIDANCE
100	1 MONTH 6 MONTHS	100000 YEN 500000 YEN	COMPANY AD. (COMPANY PROFILE)

FIG. 12

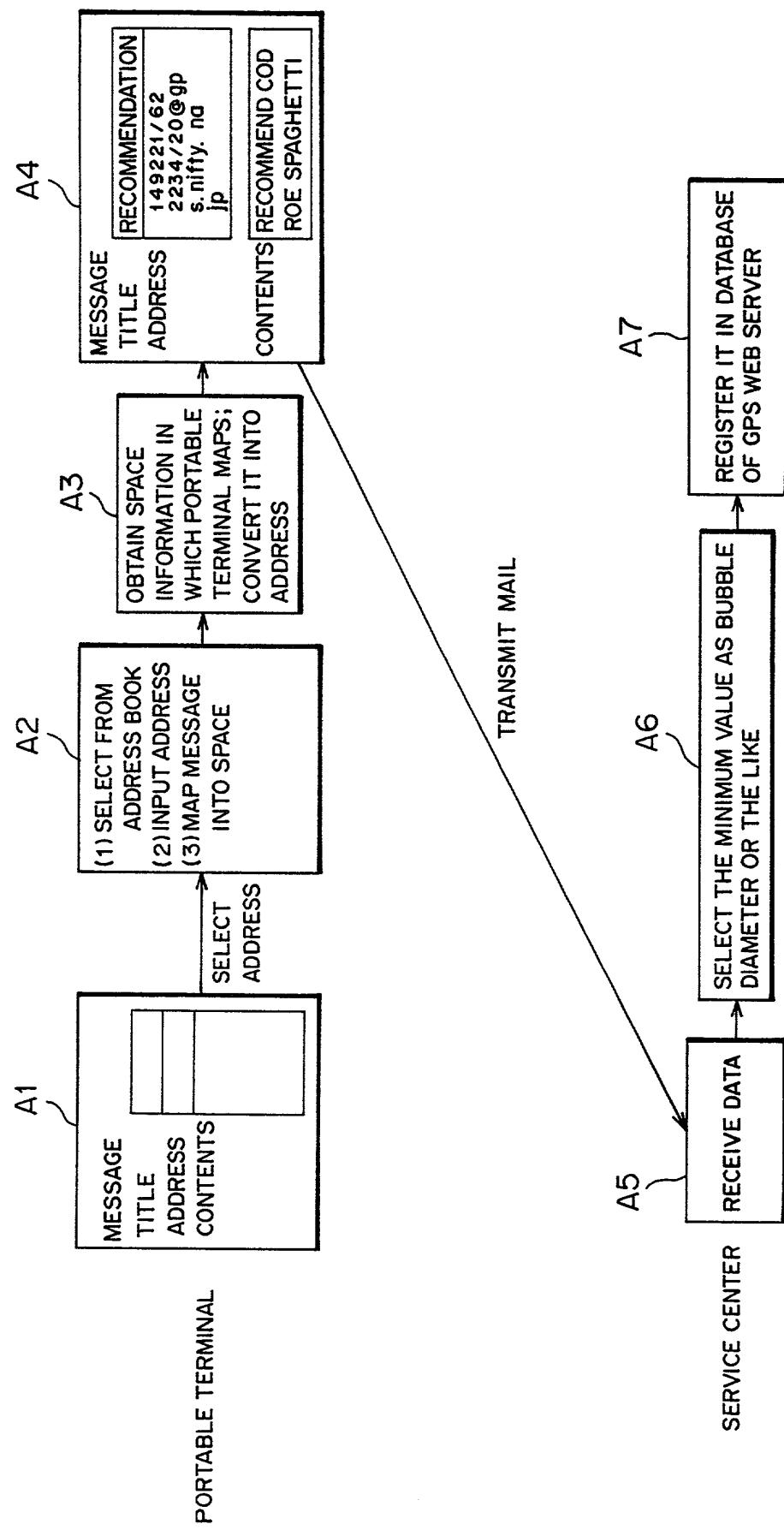


FIG. 13

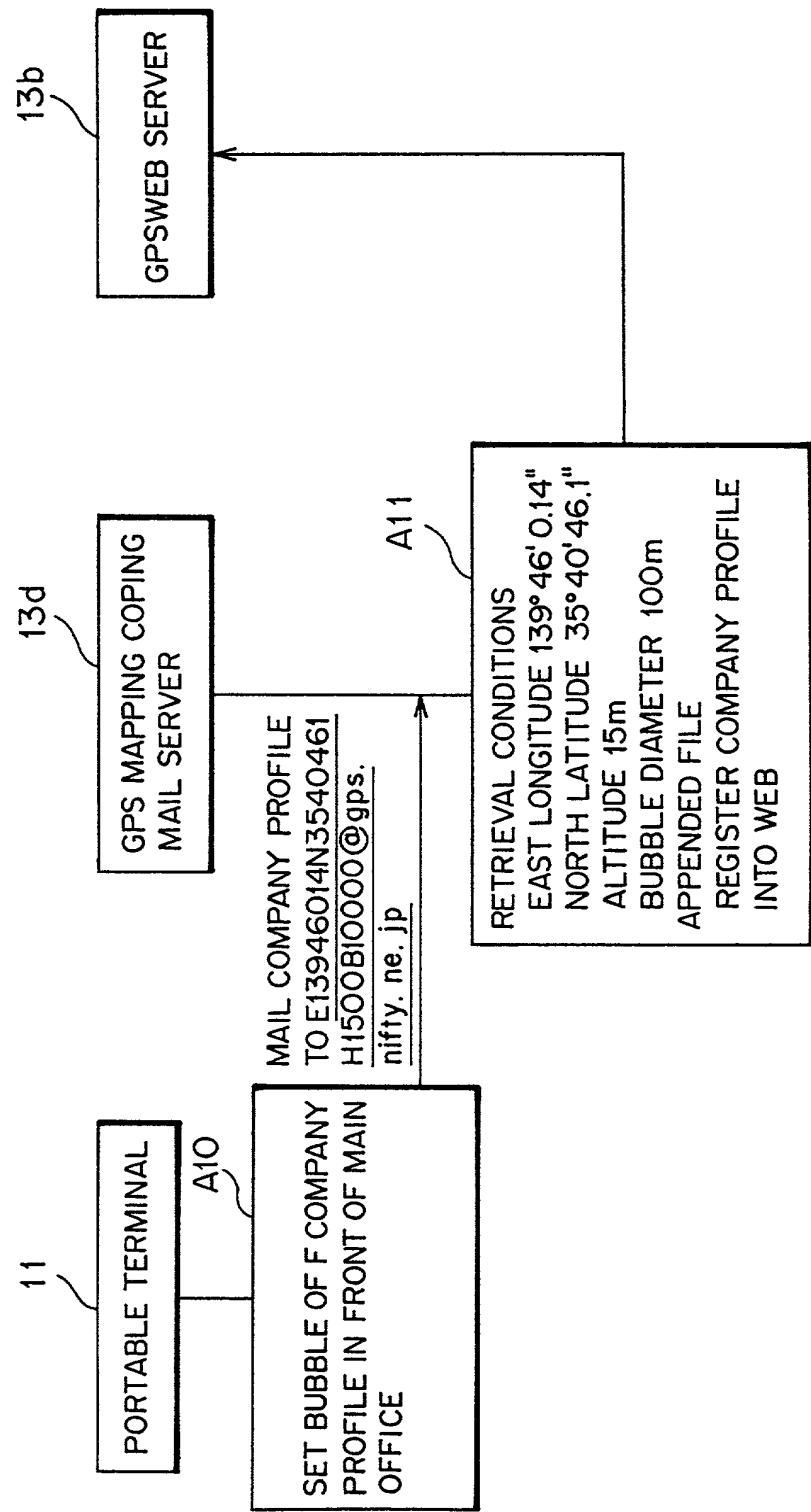


FIG. 14

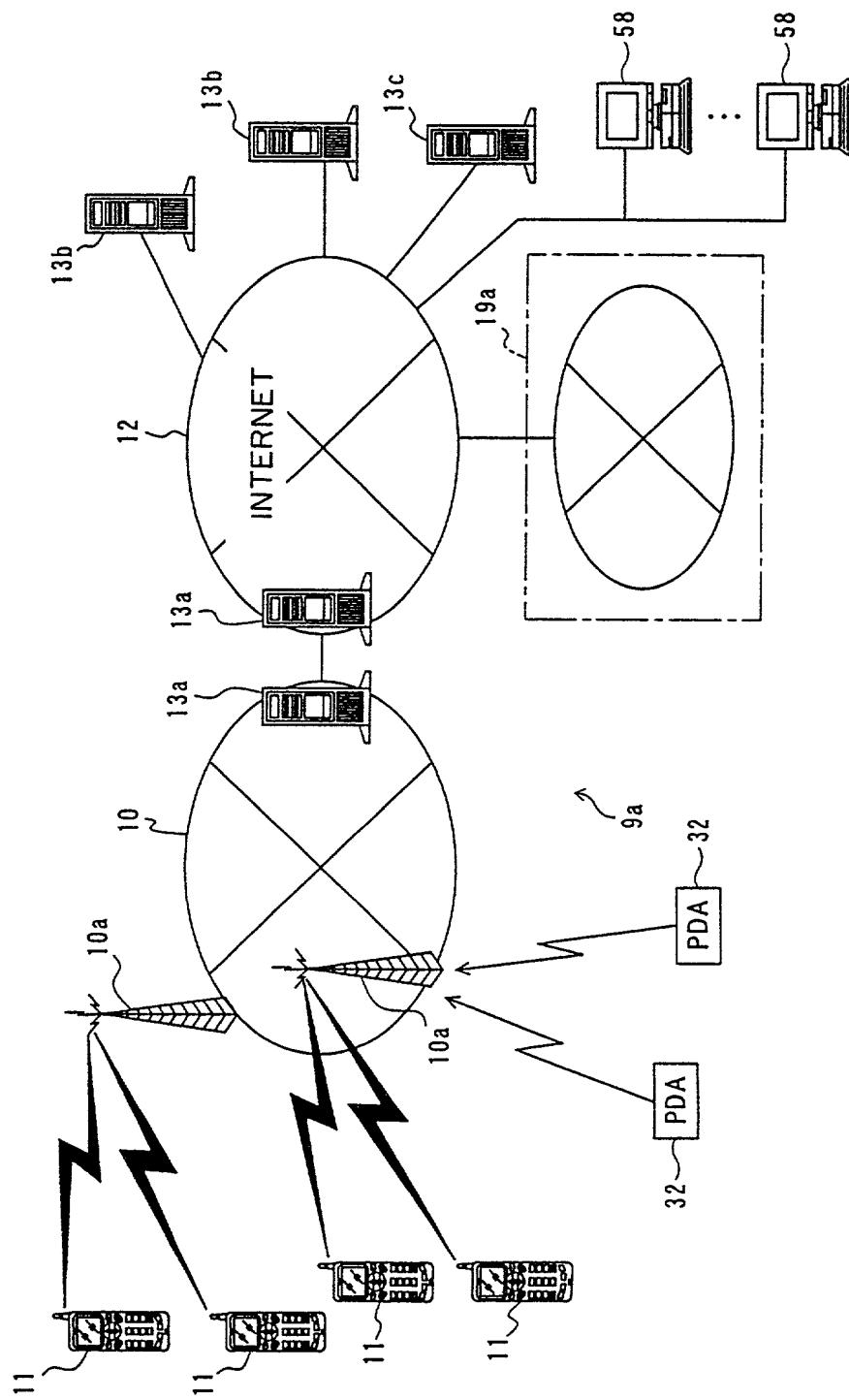


FIG. 15

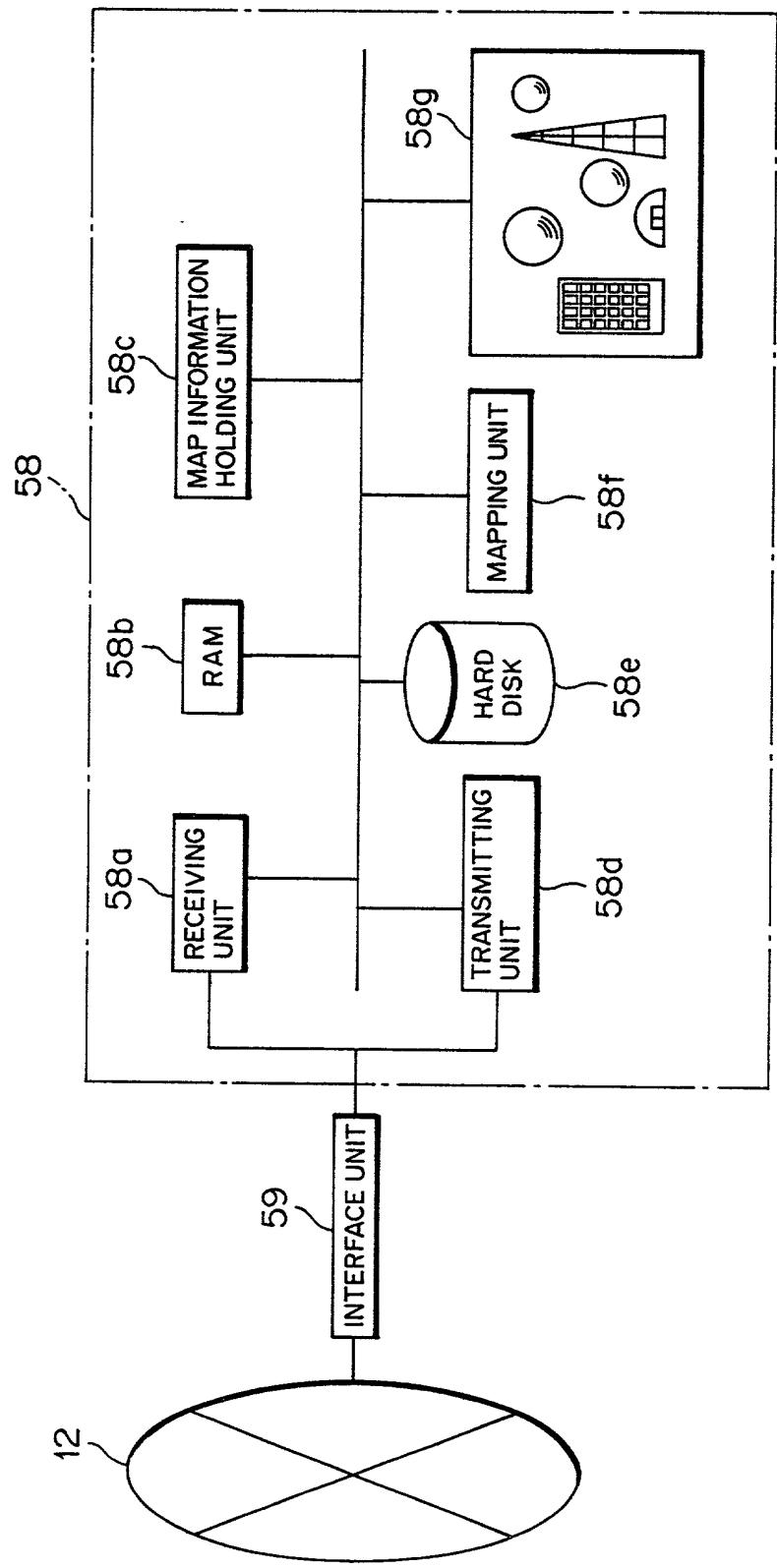


FIG. 16

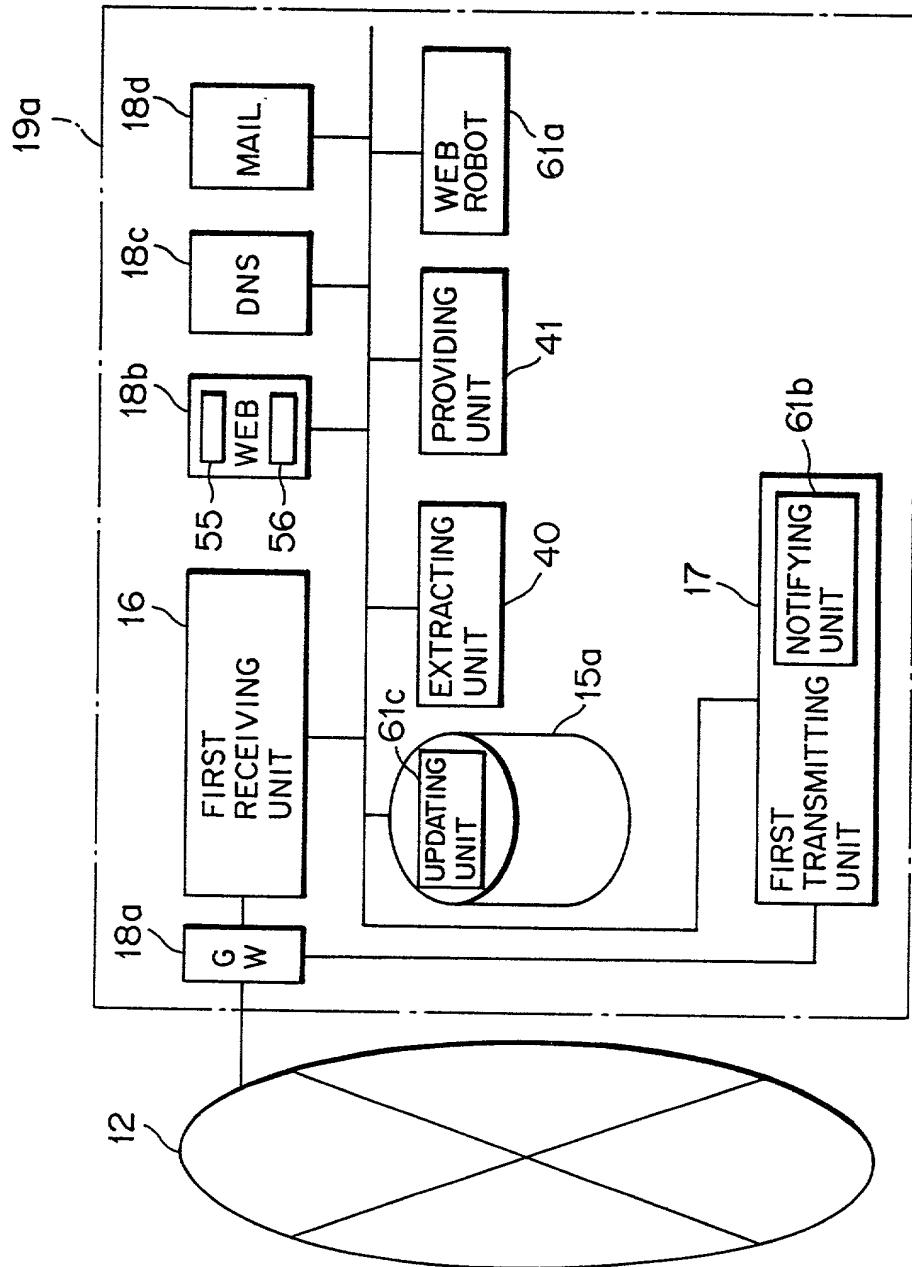


FIG. 17

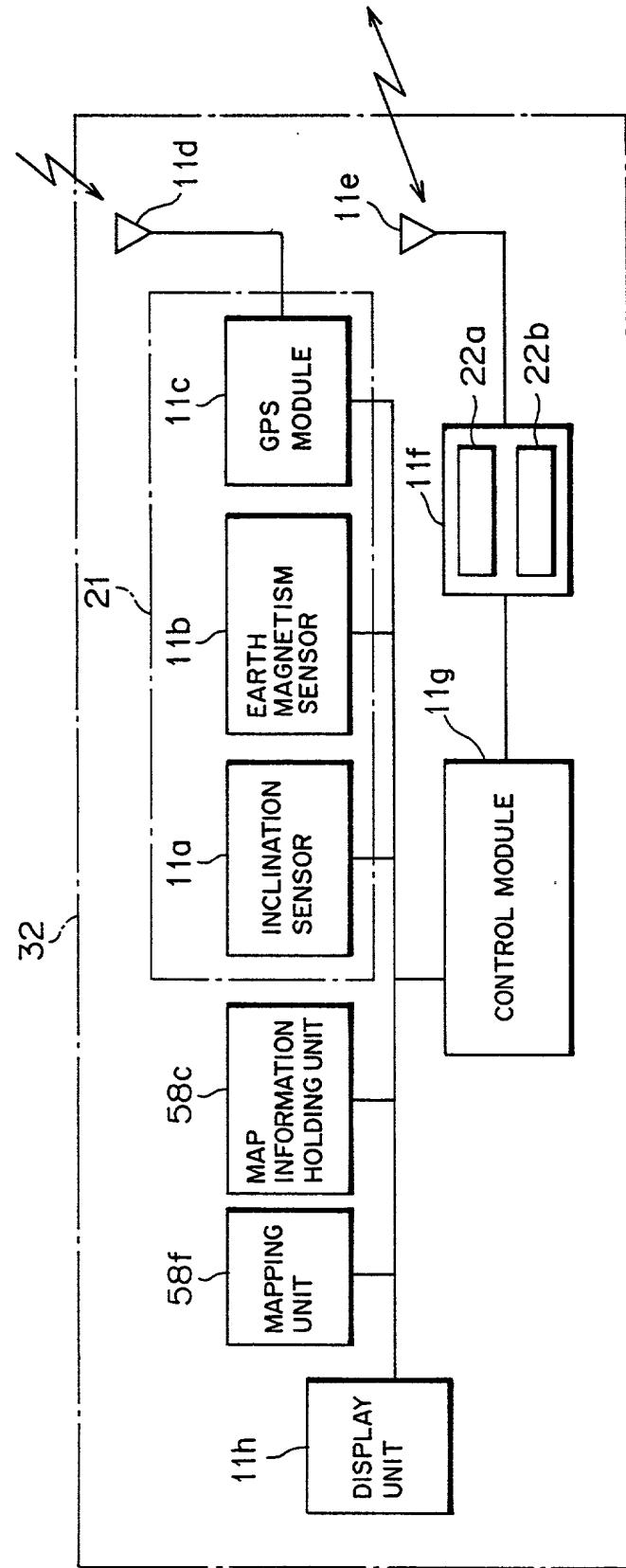


FIG.18

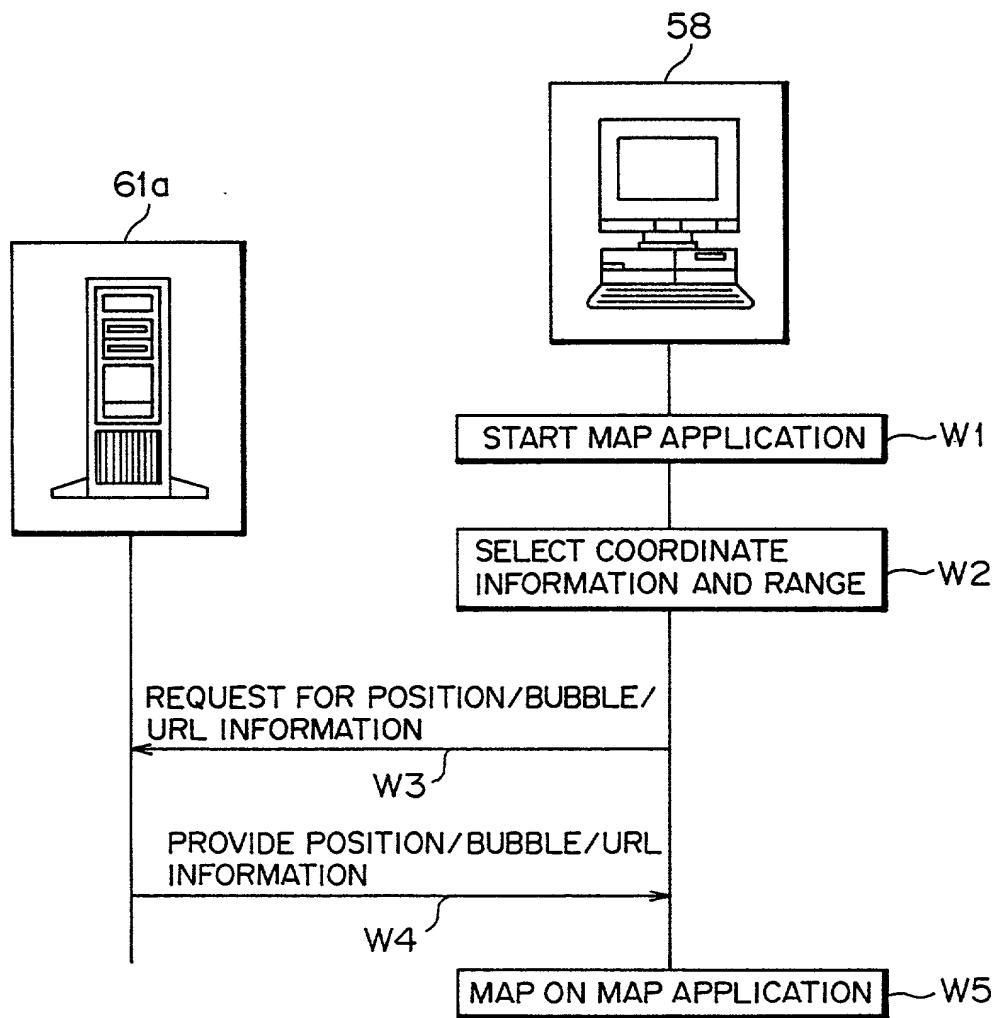


FIG. 19

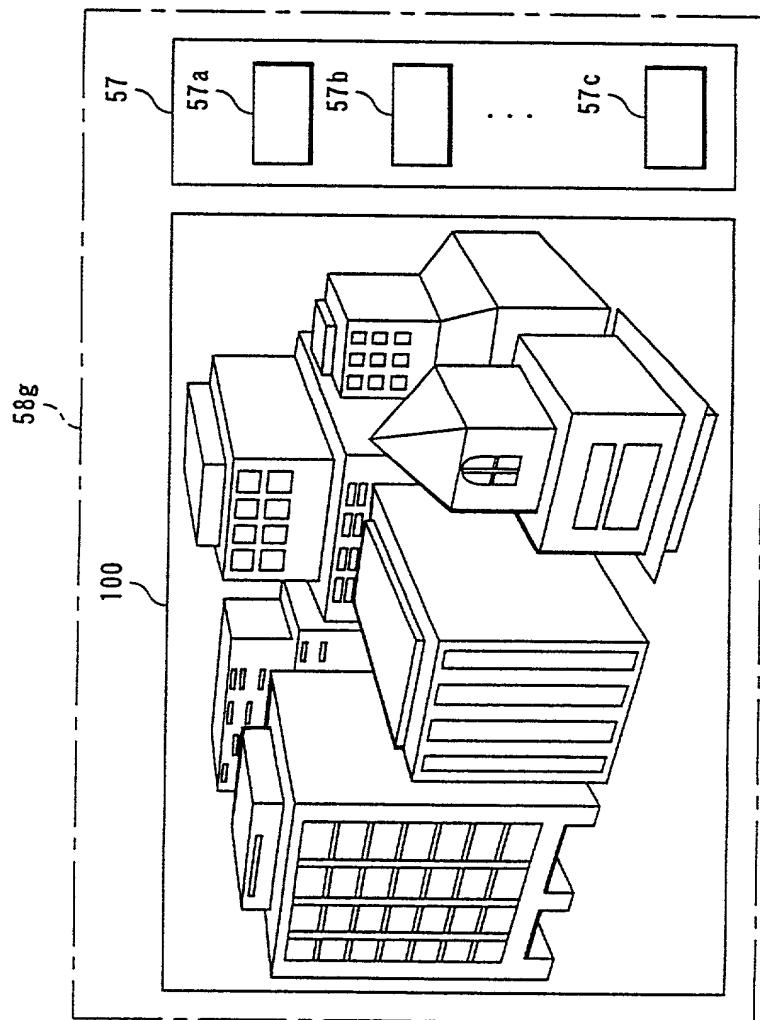


FIG. 20

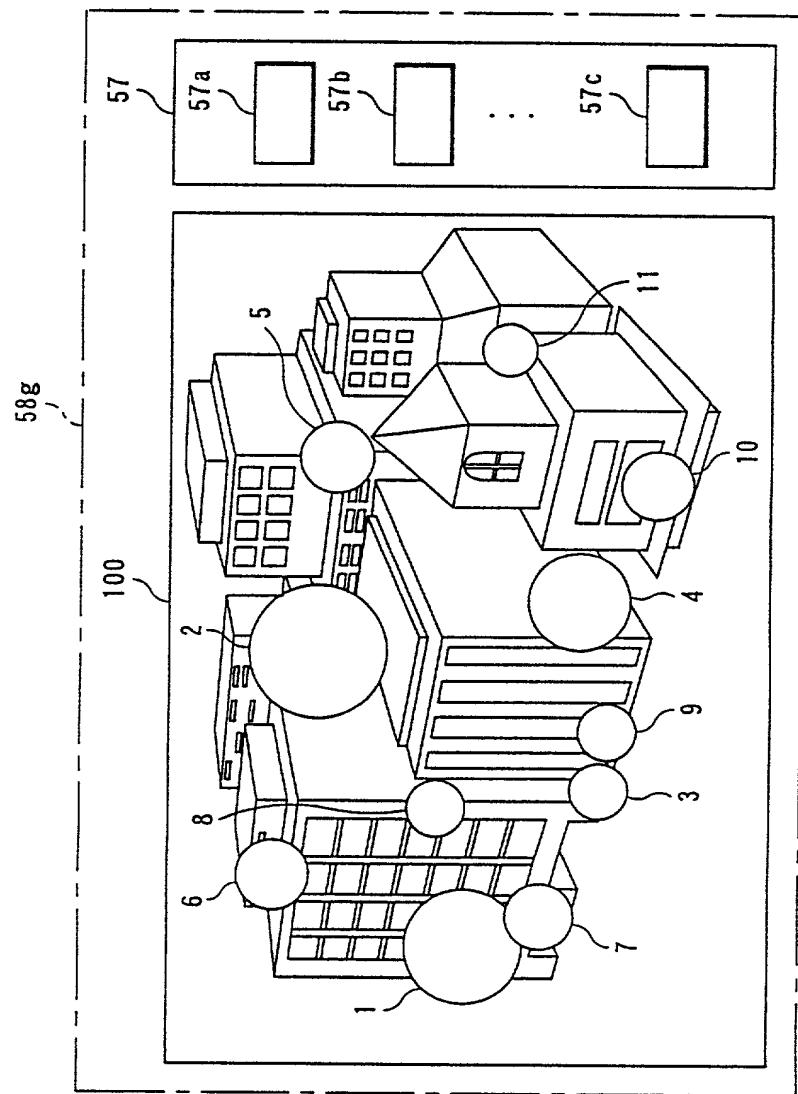


FIG. 21

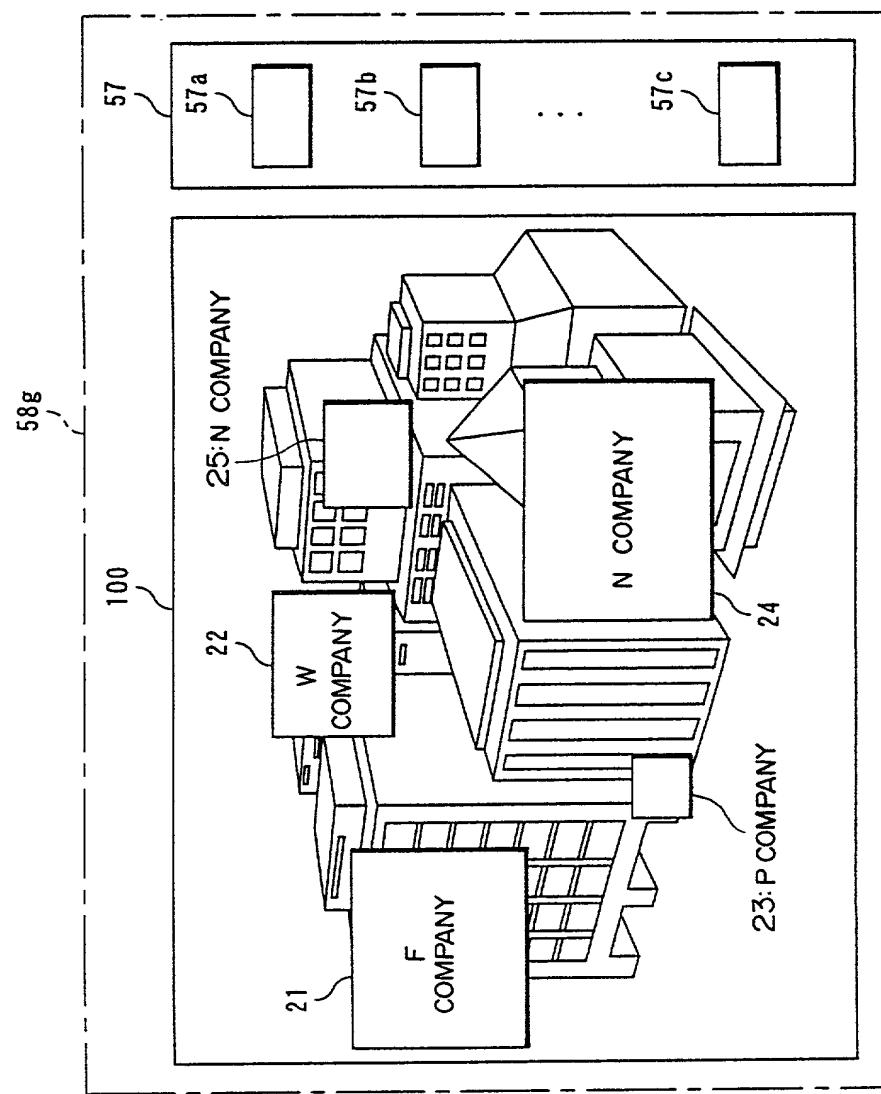


FIG. 22

63

```
<bubble>
<latitude>139, 46, 1. 3</latitude>
<longitude>35, 40, 45. 7</longitude>
<altitude>50</altitude>
<size>dynamic50</size>
<animation>honsya.gif</animation>
<lifedate>01/04/27</lifedate>
</bubble>
```

LATITUDE 139° 46' 1.3"
LONGITUDE 35° 40' 45.7"
ALTITUDE 50m
BUBBLE DIAMETER 50m
DISPLAY CHARACTER honsya.gif
DISPLAYABLE DATE : UP TO 2001/04/27

FIG. 23(a)

CHILD ELEMENTS OF DTD INFORMATION

- LATITUDE, LONGITUDE, ALTITUDE
- BUBBLE DIAMETER
- DISPLAY ANIMATION
- ATTRIBUTE INFORMATION
- STARTUP APPLICATION
- STATE FILE NAME
- URL

FIG. 23(b)

STATE FILE

- LIFE COUNTER
- LIFE DATE
- STARTUP FILE NAME
- DYNAMIC BUBBLE DIAMETER
- ACCESS HISTORY

FIG. 24

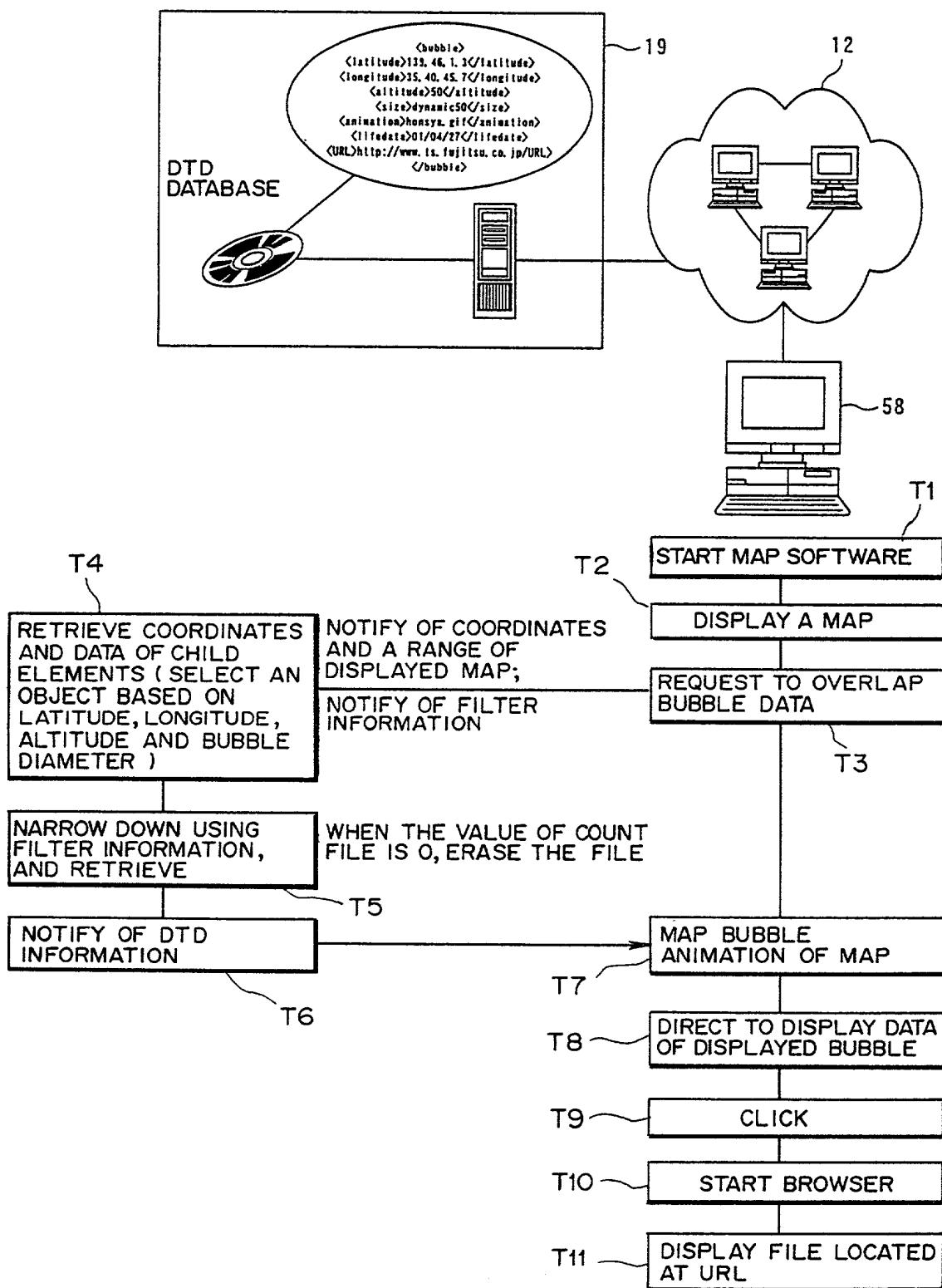


FIG. 25

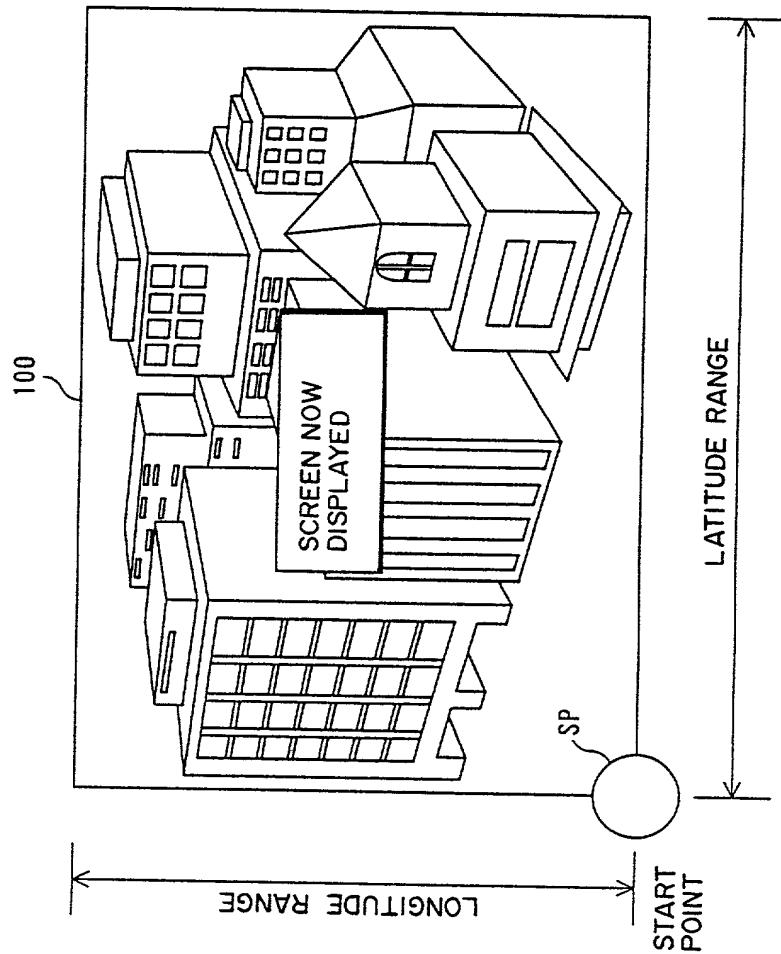


FIG. 26

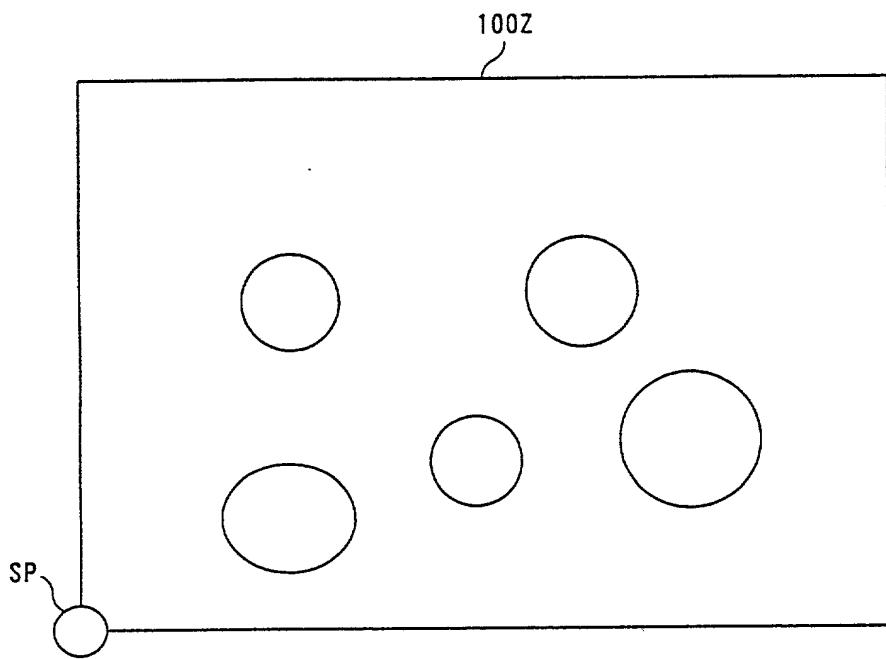


FIG. 27

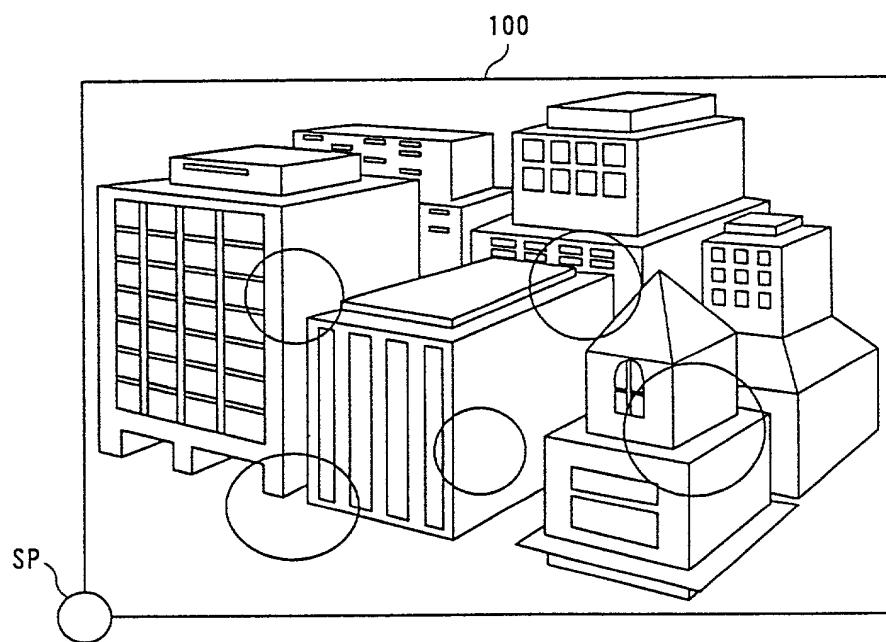


FIG.28

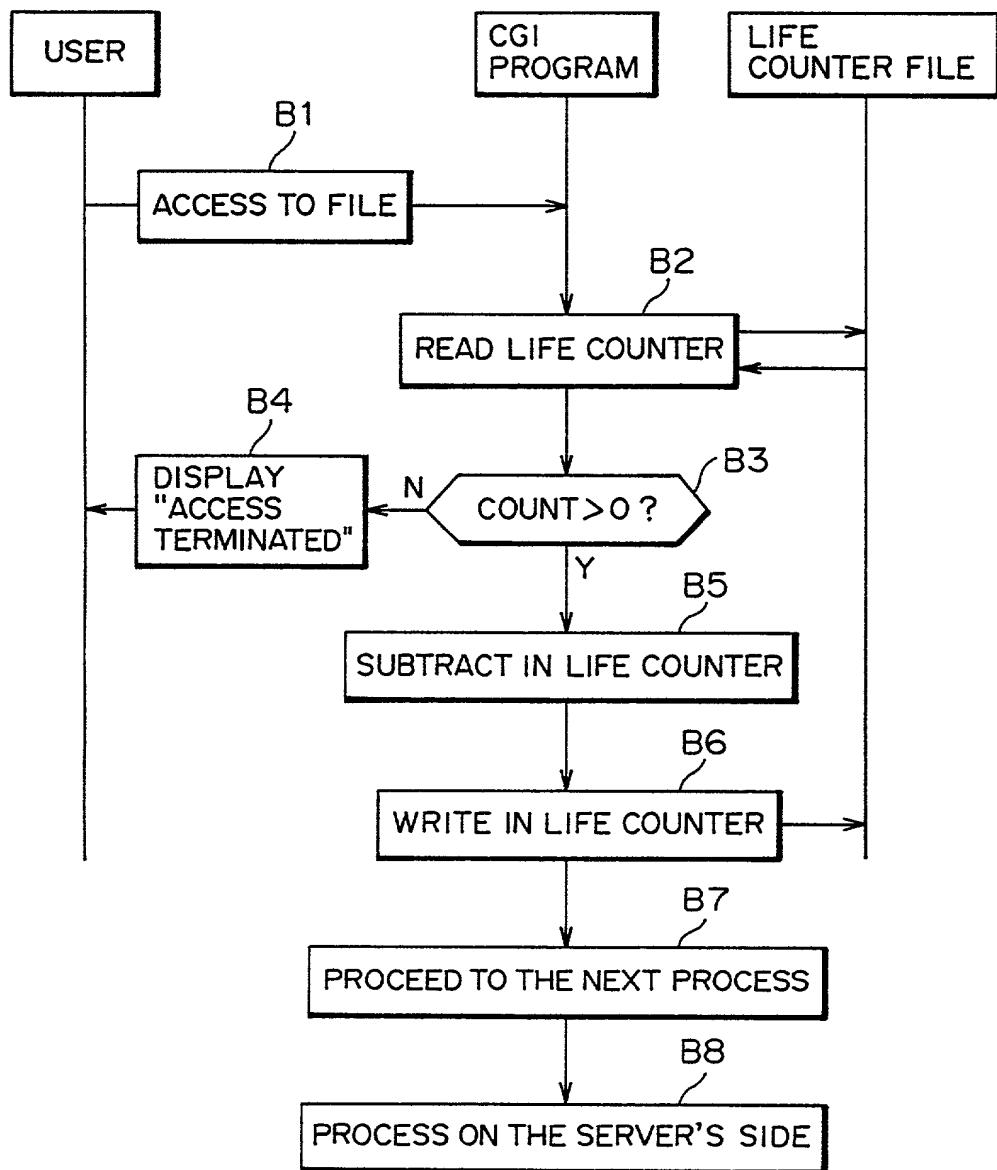


FIG. 29

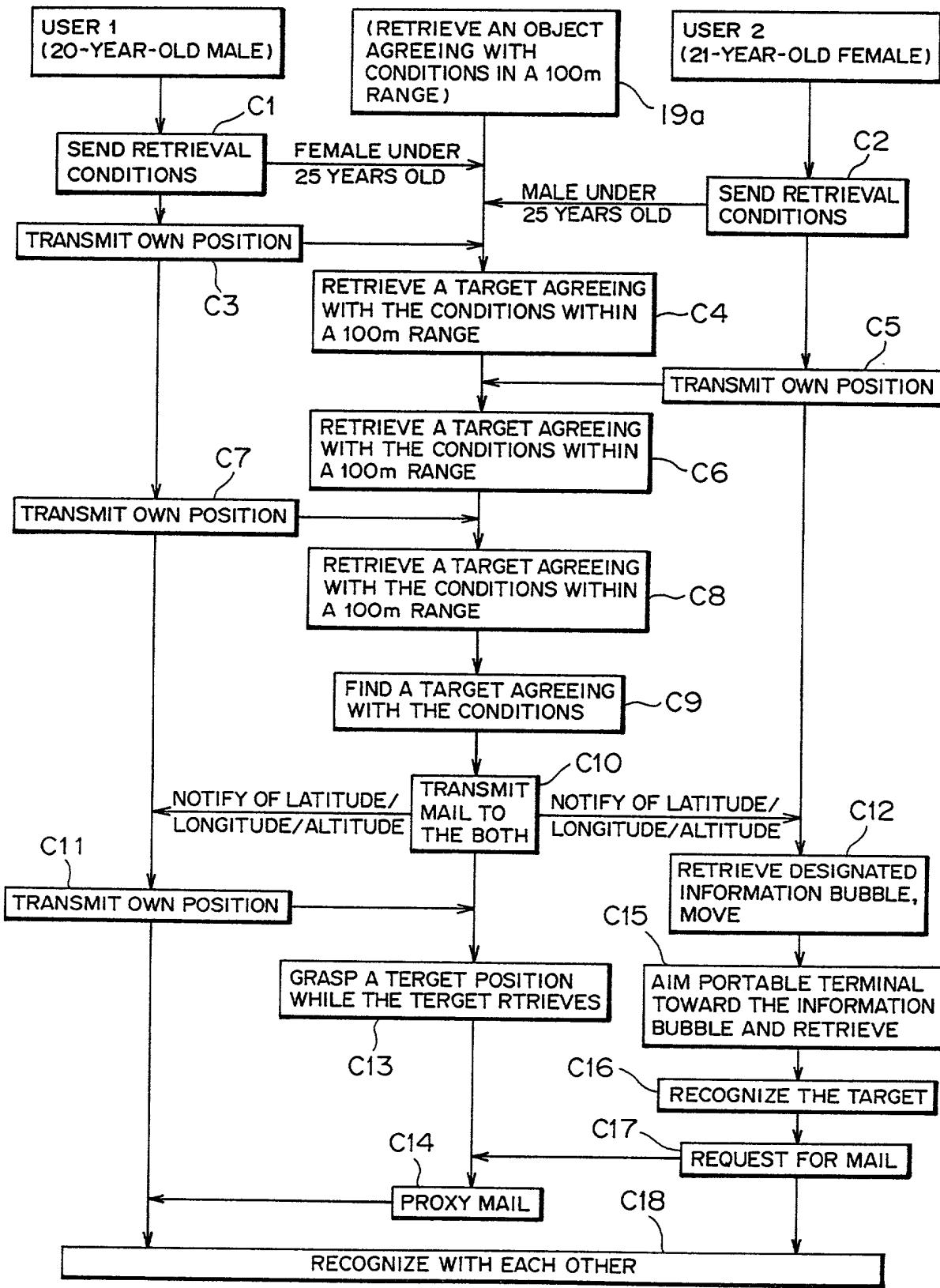


FIG. 30

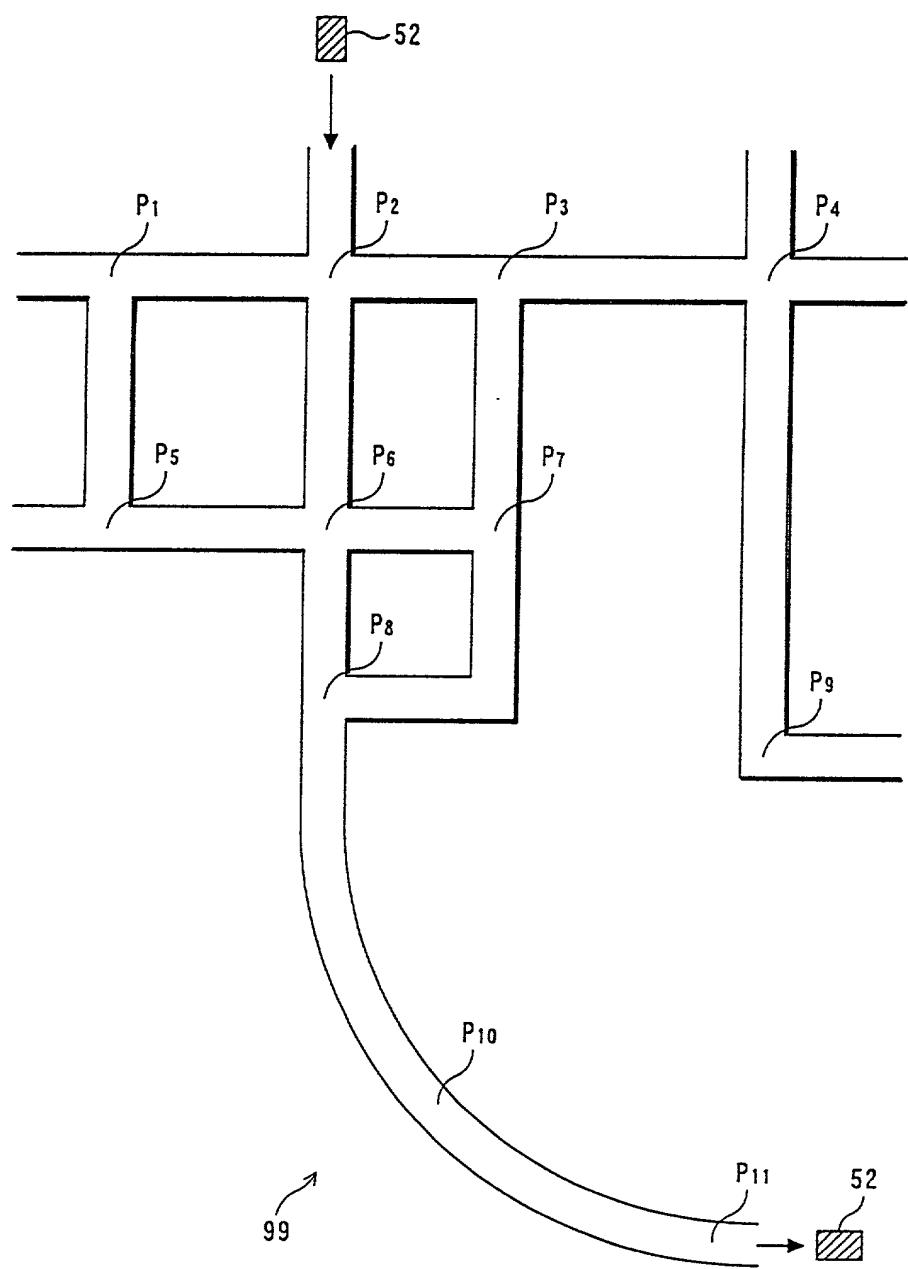


FIG. 31

